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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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27366	7590	06/01/2006	EXAMINER	
WESTMAN CHAMPLIN (MICROSOFT CORPORATION)			LY, CHEYNE D	
SUITE 1400			ART UNIT	
900 SECOND AVENUE SOUTH			PAPER NUMBER	
MINNEAPOLIS, MN 55402-3319			2168	

DATE MAILED: 06/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/733,541	Applicant(s) CAO ET AL.	
	Examiner Cheyne D. Ly	Art Unit 2168	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) 8-24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claim(s) 1-24 are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>5/24/06</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-8, drawn to a computer-implemented method of extracting information from an information source, classified in class 707, subclasses 1 and 6.
 - II. Claims 9-24, drawn to a method of generating patterns for use in extracting information from an information source, classified in class 707, subclasses 1, 7, and 100.
2. Inventions Groups I and II are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because Group II does not require the step for comparing strings in the information source. The subcombination has separate utility such as an on-line dictionary. The distinct critical features of each Group support the undue search burden if they were examined together.
3. Because these inventions are independent or distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.
4. During a telephone conversation with Todd Fronek on May 16, 2006 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-8. Affirmation of this election must be made by applicant in replying to this Office action. Claims 9-24 are

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withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

6. Claims 1-8 are examined on the merits.

OBJECTIONS

7. The disclosure (PAGE 15, LINE 18) is objected to because it contains an embedded hyperlink and/or other form of browser-executable code. Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code. See MPEP § 608.01.

CLAIM REJECTIONS - 35 USC § 101

8. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

9. Claims 1-8 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

10. Claims 1-8 are directed to a method and computer-readable medium for extracting information from an information source. However, the claims do not recite any limitations wherein a tangible and concrete result would inherently flow from the claimed invention. For example, Applicant discloses the invention with “an extraction module 200 that extracts information from a database 202 and provides an output of extracted information (page 11) and

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provides an output of unranked patterns 216 generated from corpus 214 that include wildcards to pattern ranking module (page 15). However, the disclosed results do not inherently flow from the claims when the claimed invention is read as a whole.

CLAIM REJECTIONS - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

13. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nicholas Jr. (2000) (Nicholas hereafter) taken with Eskin et al. (April 2003) (Eskin hereafter).

14. In regard to claim 1, Nicholas discloses a computer-implemented method of extracting information from an information source (page 1174, columns 1-2, Introduction section), comprising:

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- a. Accessing strings in the information source (page 1174, columns 1-2, Introduction section, especially the disclosure of database searching); and
 - b. Comparing the strings in the information source with generalized extraction patterns and identifying strings in the information source that match at least one generalized extraction pattern (page 1182, column 2, Computing Similarity Matrices section), the generalized extraction patterns including a words (page 1176, column 2, Word Search section);
15. However, Nicholas does not describe the limitation of wildcard.
16. Eskin describes incorporating wild-cards into the model significantly improves classification performance (Abstract etc.). One of ordinary skill in the art at the time of the instant invention would have been motivated by Eskin to improve the classification model described by Nicholas (page 1189, column 2, lines 3-5).
17. Eskin describes wildcards, wherein the wildcards denote that at least one word in an individual string can be skipped in order to match the individual string to an individual generalize extraction pattern (page 197, lines 6-7). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the wildcards of Eskin to improve the classification method of Nicholas.
18. In regard to claim 2, Nicholas discloses extracting at least two elements from strings in the information source that have been identified to match, the at least two elements being based on at least two corresponding elements in a corresponding generalized extraction patterns (page 1176, Figure 2). Therefore, it would have been obvious to one of ordinary skill in the art at the

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time of the invention to use the wildcards of Eskin to improve the classification method of Nicholas.

19. In regard to claim 3, Nicholas describes all the limitations of said claim **except** for the limitation of there is at least one word positioned between said at least one of the corresponding elements and the wildcards. Eskin describes there is at least one word positioned between said at least one of the corresponding elements and the wildcards (Figure 3). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the wildcards of Eskin to improve the classification method of Nicholas.

20. In regard to claim 4, Nicholas describes all the limitations of said claim **except** for the limitation of the wildcards indicate the number of words that can be skipped. Eskin describes the wildcards indicate the number of words that can be skipped (page 197, lines 6-7). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the wildcards of Eskin to improve the classification method of Nicholas.

21. In regard to claims 5-8, Nicolas describes the computer readable medium for implementing method as described above. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the wildcards of Eskin to improve the classification method of Nicholas.

CONCLUSION

22. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

c. Williamson et al. (US006785417B1).

d. Hunter et al. (US005606690A)


23. Patent applicants with problems or questions regarding electronic images that can be viewed in the Patent Application Information Retrieval system (PAIR) can now contact the USPTO's Patent Electronic Business Center (Patent EBC) for assistance. Representatives are available to answer your questions daily from 6 am to midnight (EST). The toll free number is (866) 217-9197. When calling please have your application serial or patent number, the type of document you are having an image problem with, the number of pages and the specific nature of the problem. The Patent Electronic Business Center will notify applicants of the resolution of the problem within 5-7 business days. Applicants can also check PAIR to confirm that the problem has been corrected. The USPTO's Patent Electronic Business Center is a complete service center supporting all patent business on the Internet. The USPTO's PAIR system provides Internet-based access to patent application status and history information. It also enables applicants to view the scanned images of their own application file folder(s) as well as general patent information available to the public.

24. For all other customer support, please call the USPTO Call Center (UCC) at 800-786-9199. The USPTO's official fax number is 571-272-8300.

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25. Any inquiry concerning this communication or earlier communications from the examiner should be directed to C. Dune Ly, whose telephone number is (571) 272-0716. The examiner can normally be reached on Monday-Friday from 8 A.M. to 4 P.M.

26. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tim Vo, can be reached on (571) 272-3642.

C. Dune Ly / 
Patent Examiner
5/28/06